National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property			
historic name Tyro Mill other names/site number VDHR file no. 062-0028			
2. Location			
street & number Highway 56 (Crabtree Falls Highway)		N/A	not for publication
city or town Tyro			N/A vicinity
state Virginia code VA county Nelson code	125	zip code	22976
3. State/Federal Agency Certification			
As the designated authority under the National Historic Preservation Act of 1966, as amen			
request for determination of eligibility meets the documentation standards for registering pro	-	_	
and meets the procedural and professional requirements set forth in 36 CFR Part 60. In r	-		
meet the National Register Criteria. I recommend that this property be considered significant	int nat	tionally statev	vide <u>X</u> locally. (
See continuation sheet for additional comments.)			
Signature of certifying official/Title Date			
Signature of Certifying official/Title Date			
Virginia Department of Historic Resources			
State or Federal agency and bureau			
otate of Federal agency and bareau			
In my opinion, the property meets does not meet the National Register crite comments.)	eria. (See continuation	on sheet for additional
Signature of commenting or other official/Title Date			
State or Federal agency and bureau			
4. National Park Service Certification			
I hereby certify that this property is:			_
entered in the National Desister			
entered in the National Register. See continuation sheet. Signature of the Keeper	r		
See continuation sheet. Signature of the Keeper determined eligible for the National Register.	'		
See continuation sheet.			
determined not eligible for the National Register. Date of Action			
removed from the National Register.			
other (explain):			

5. Classification					
Ownership of Propert	Number of Resources within Property				
(Check as many boxes as apply) (Check only one box)		(Do not include previously listed resources in the count.)			
X private public-local public-State public-Federal	X building(s) district site structure object	ContributingNoncontributing20buildings01sites00structures00objects21Total			
Name of related multi (Enter "N/A" if property	ple property listing is not part of a multiple property listing.)	Number of contril		rces previously listed	
N/A					
6. Function or Use Historic Functions (Enter categories from Category INDUSTRY	instructions) Subcategory manufacturing facility (mill)	Current Functions (Enter categories f Category VACANT/NOT IN I	rom instructio	ons) Subcategory	
DOMESTIC	single dwelling	VACANTACTINA	OGL		
7. Description					
Architectural Classification		Materials			
(Enter categories from	instructions)	(Enter categories from instructions)		ons)	
No Style		walls M roof M other W	tone letal letal /ood		

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance	
Applicable National Register Criteria	Criteria Considerations
(Mark "x" in one or more boxes for the criteria qualifying	(Mark "X" in all the boxes that apply.)
the property for National Register listing.)	
	Property is:
X A Property is associated with events that have made a	
significant contribution to the broad patterns of our	A owned by a religious institution or used
	for
history.	religious purposes.
B Property is associated with the lives of persons	B removed from its original location.
significant in our past. X C Property embodies the distinctive characteristics of	C a birthplace or a grave.
a type, period, or method of construction or	D a cemetery.E a reconstructed building, object, or structure.
represents the work of a master, or possesses high	
artistic values, or represents a significant and	G less than 50 years of age or achieved significance
distinguishable entity whose components lack	within the past fifty years.
individual distinction.	main are past my years.
D Property has yielded, or is likely to yield,	
information important in prehistory or history.	
Areas of Significance	Period of Significance
(Enter categories from instructions)	1046 1056
	1846-1956
INDUSTRY	Significant Dates
ARCHITECTURE	1846-47, 1925
Significant Person (Complete if Criterion B is marked above) N/A	Cultural Affiliation N/A Architect/Builder Law, Matthias (millwright)
Narrative Statement of Significance (Explain the significance of the property on one or more confidence)	tinuation sheets.)
9. Major Bibliographical References	
Bibliography (City the books, articles, and other sources used in property)	a this form on one or more continuation shoots \
(Cite the books, articles, and other sources used in preparing	g this form on one or more continuation sneets.)
Previous documentation on file (NPS):	rimary location of additional data:
	State Historic Preservation Office
(36 CFR 67) has been requested	Other State agency
previously listed in the National Register	Federal agency
previously determined eligible by the National	Local government
Register	University
designated a National Historic Landmark	Other Other
	lame of repository:
#	

 recorded by	y Historic A	merican	Engineering	Record
#				

10. Geographical Data

Acreage of Property approximately 1.71 acres

UTM References

(Place additional UTM references on a continuation sheet)

add additional of twi rolororlood on a continuation oncoty						
Zone	Easting Northing	Zone	Easting Northing			
1 17	675550 4187290	3				
2		4				
	See co	ntinuation sh	eet.			

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title	J. Daniel Pezzoni				
organization	Landmark Preserv	ation Associat	tes	date	March 23, 2005
street & number	6 Houston St.			telephone	(540) 464-5315
city or town	Lexington	state	VA	zip co	de 24450

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name	Catheri	<u>ne Correll-Walls</u>	and Mac	k L. Walls		
street & number		7938 Hog Islan	d Road	telephone	(757) 365-9224	
city or town	Surry	state	VA	zip code	23883	

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

NPS Form 10-900-a (8-86)

OMB Approval No. 1024-0018

United States Department of the InteriorNational Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Tyro Mill Nelson County, Virginia

NARRATIVE DESCRIPTION

Summary

Tyro Mill, located in the Massies Mill vicinity of western Nelson County, is a multi-story frame mill built in 1846-47 with an addition made in the late nineteenth century. The mill has a metal-sheathed gable roof, early twentieth century corrugated metal sheathing over vertical boards, and a stone foundation. Other exterior features include an overshot metal wheel in a stone wheel well, remnants of the head race, six-over-six windows, Dutch doors and batten window shutters on wrought strap hinges, and a gabled drive-through. Inside, the stone walls of the basement and the exposed structure of the frame levels are mostly whitewashed. Architectural features include chamfered posts and two sets of stairs. Original machinery includes wood gears and drive shafts, two runs of millstones, and a husk frame in the basement gear pit. Metal gears and wood and metal pulleys for belt drives date to 1925. There are also hoppers, grain bins, chutes and elevators, remnants of bolters and screw conveyors, and other production-related features.

To the southwest of the mill stands a mid-nineteenth century log dwelling—traditionally identified as the miller's house—with twentieth century frame additions and front porch. The one-bay one-story-with-garret house has v-notched corners, a metal-sheathed gable roof, a stone and brick end chimney, and sliding multi-pane windows. The interior was refinished in the early twentieth century and has a ladder stair and simple mantel. Behind the dwelling is a collapsed frame outbuilding. Although the dwelling and mill are not oriented with compass north, for the purposes of the nomination they are described as though they are so that the wheel side of the mill is described as the south side and the front side of the dwelling is described as the north side.

The mill and dwelling stand at an elevation of approximately 900 feet above sea level on the west side of Highway 56 (Crabtree Falls Highway) and the Tye River, a tributary of the James. The buildings stand at the base of a small foothill of The Priest, a 4,063-foot-high mountain that is one of the elevations of the Blue Ridge. Between the buildings and Highway 56 are two store buildings—one dating to 1893, the other to 1940—and other historic and modern buildings stand nearby, a part of the community of Tyro.

Inventory

- 1. Tyro Mill. 1846-47. Contributing building.
- 2. Dwelling. Mid-nineteenth century. Contributing building.
- 3. Outbuilding ruin. Twentieth century. Noncontributing site.

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

Tyro Mill Nelson County, Virginia

Description (continued)

Mill Exterior

Tyro Mill measures approximately fifty-five feet on its south and north sides and approximately thirtyfive feet on its east and west gable ends. The mill stands on a stone foundation that incorporates many large stones. The mortar and evidence for whitewash are best preserved on the full basement story of the east end, whereas the mortar and evidence for whitewash on the south side is mostly weathered away, probably from water splashing off the wheel. On the east end are an entry and a window. The entry has a stone threshold, a pegged jamb, and a whitewashed Dutch door with vertical battens attached with wrought nails. A small metal sign, now illegible, is attached to the door lintel. The window has a pegged frame into which horizontal wood bars are set. The window formerly had a shutter (a pintle survives). At the top of the window is attached a wooden mount that appears to have supported a drive shaft that extended from inside the mill. Some sort of wooden mount was also attached to the bottom of the window and the wood bars removed to accommodate it. The top and bottom mounts are attached by cut nails with augmented heads. High in the wall to the right of the entry is what may be a stove flue hole. At the south corner of the foundation wall, above the end of the wheel well, are features that may be associated with a weir gate. Projecting at grade at the corner is a stone with a slot carved into it, possibly the seat of a hinge. Directly above a slotted piece of iron projects from the wall and at the top of the corner is a mortise, perhaps the attachment point for the top of a hinge assembly.

On the south foundation wall is an overshot metal waterwheel in a stone wheel well. Affixed to the wheel well wall and scattered in the vicinity are poured concrete supports for a corrugated metal flume. The flume survives in situ at the southwest corner of the mill where it extends westward to the head race. The flume is elevated several feet off the ground on concrete supports. A photograph from the early 1970s shows that the flume formerly angled downward to the outside of the waterwheel. It was supported by a tall concrete pylon that stands at the end of a stone wall that extends out from the mill to form the west end of the wheel well. The various concrete features and fragments have river cobble aggregate, circular-saw impressions from the forms, and embedded railroad rails to which machinery and other features were formerly attached. Above the wheel well and in front of the waterwheel is a window into which are set wooden members with peg holes and angled surfaces (these may be pieces of original mill workings reused as shores). There are a number of openings in and projections from the stonework on this elevation including a long stone shelf below the aforementioned window, a pair of mortises near the front end of the wheel, and an opening aligned with the aforementioned pylon through which a drive shaft extended (the stonework below the opening is covered with oil residue from the lubrication of the shaft). Most of the west and north foundation walls are below grade, although at the east end of the north foundation wall is a long horizontal window with a pegged frame and vertical wood bars, about half of which are missing. Extending from the corner near this window is a stone retaining wall that creates a terrace on the north side of the mill, an area where drivers could

National Register of Historic Places Continuation Sheet

Section number 7 Page 3

Tyro Mill Nelson County, Virginia

Description (continued)

maneuver their wagons or trucks during grain delivery. On the west (upslope) side of the mill is another stone retaining wall with inset stone steps that forms a facing for the embankment of the head race, which is lined with concrete (possibly over earlier stonework).

The first and second stories of the mill and the gables above (behind which are the two attic floors) are sheathed with corrugated metal siding attached with wire nails. Under the metal siding, on both the original section of the mill and the addition, is vertical-sawn vertical board siding attached with cut nails. Observable sections of the wood siding are weathered, suggesting it was the original exterior material rather than an underlayer for some other siding. (An early 1970s account of the mill as it was before the metal siding described it as having "weather boards" but this may have been an inaccurate use of the term.) Battens may originally have covered the seams between boards but the discovery of cutnailed battens on the insides of the seams in the third floor may indicate the exterior was not boardand-batten. There are traces of whitewash on the boards visible in the eaves of the north elevation and on the formerly exterior boards on the wall between the original section and addition, suggesting the entire exterior of the mill—the wood siding as well as the foundation stonework—was once whitewashed. A band of sheet metal covers the south wall above the foundation. The sheet metal appears to have served as a splash back above the waterwheel and may date to before the addition of the corrugated metal siding in the early twentieth century. There are multiple window openings on all elevations and in the gables. Many retain their six-over-six sashes and have batten shutters hung on wrought strap hinges or machine-made triangular hinges. Some windows have iron bars behind the sashes. Some or all of the iron bars may have been a retrofit. In the eaves project the ends of the second-floor ceiling joists, every third joist thicker than the others.

At the west end of the north elevation are two entries, one into the original section of the mill and the other into the addition. Both have whitewashed Dutch doors constructed with wrought nails (presumably the addition's door was recycled from somewhere else in the mill). The doors or their jambs have carved, stenciled, or penciled graffiti and ciphering. The door to the addition has stenciling that reads "Tyro Mill" in arcing red- or black-painted capital letters (the letterer may have used a stencil designed for barrel heads). A name ending in "W. Massie" also appears in stenciled letters (this was probably the name of Hope W. Massie who operated the mill in the late nineteenth century). A name, possibly "Coffey," is written in red pencil or crayon on the door to the original section. The entries are sheltered by a gabled drive-through of wire-nailed circular-sawn construction. The drive-through has square posts, vertical board siding in the gable covered with corrugated metal, and a smaller platform with a wire-nailed board floor and stone steps. On the mill wall under the roof of the drive-through is a metal sign painted with the name "M. E. Massie," the mill's operator in the early twentieth century. On the first-story south side of the mill are a whitewashed batten door over the waterwheel and, to the left of the door, boards nailed to the corrugated metal siding that formerly served as attachment points for a shed-roofed shelter over machinery that projected at this location (the shelter is shown in an early

National Register of Historic Places Continuation Sheet

Section number 7 Page 4

Tyro Mill Nelson County, Virginia

Description (continued)

1970s photograph). The south-side door and the door to the original section on the north side may formerly have had screen doors. A photograph taken in the first decade of the twentieth century shows a pent roof running along the length of the north elevation. On the first story of the east end is a small low opening adjacent to millstones on the interior.

Mill Interior: Basement

The accessible basement extends only under the original section of the mill (the addition does not appear to have a basement). The exposed stone walls of the basement, its ceiling beams and joists and the undersides of the floorboards above, and two thick posts under the mid-points of the two principal beams all have traces of whitewash. The ceiling beams are hewn whereas the joists are vertical-sawn, probably pit-sawn. The floor is mostly covered with mud that has washed in from outside, although in places a stone floor is exposed (a 1925 account of the mill described it as having a stone-floored basement). In the northeast and northwest corners are half-round logs and other material that may represent remnants of a former raised wood floor along the north wall of the basement (or they may only be wood stored in the corners). The two posts are carefully chamfered and support bolsters with beveled edges. There are two original stairs, both of cut-nailed construction. One stair rises beside the easternmost post. It has newels with rounded tops, handrails with chamfered upper edges, square balusters slotted into the bottom of the handrails, replacement treads, and no risers. The other stair rises in the southwest corner and although it is missing most of its treads, balusters, and lower end it retains a feature missing from the other stair. Both stairs were originally stiffened by treads at the top, middle, and bottom that were mortise-and-tenoned to the stringers and the projecting ends secured with pegs. The corner stair retains the projecting ends and pegs although the treads themselves are missing. The stair near the easternmost post has only the mortises where the projecting ends/tenons formerly passed through. The Dutch door is hung on four wrought strap hinges (two per leaf) with diamond-shaped ends. The vertical battens are wrought-nailed to wide horizontal battens. On the bottom batten of the upper door leaf is painted "Tyro Mills Va/Nelson Co. Va." At the bottom corner of the bottom leaf is a wood latch attached with cut nails and an apparently earlier wood spring latch. (A better preserved example of a wood spring latch is on the first-story original section Dutch door.) Iron staples mounted on the door frame once received a cross bar for securing the upper door leaf from forced entry.

On the left-hand or south side of the basement is the gear well containing the gear exchanges for transmitting power from the waterwheel to the millstones, elevators, and other machinery. Most of the gears are steel and date to a 1925 overhaul but they are contained in a heavy wooden husk frame that is original. Most of the husk frame's timbers are hewn but the top pieces across the front are planed and have beaded edges. Several beams have evidence for former machinery emplacements, perhaps the original wood gears that were removed in 1925. Transverse beams rigidify the frame and provide

National Register of Historic Places Continuation Sheet

Section number 7 Page 5

Tyro Mill Nelson County, Virginia

Description (continued)

gear mounts. Beams with decoratively shaped ends appear to have served to raise and lower the former wooden gears. One of the latter beams is a circular-sawn replacement. Other beams attach to wooden frameworks that could be raised and lowered by screw lifts with handles that stand near the two millstones on the floor above. A transverse beam at the west end of the frame has evidence for what may have been gears to operate a third run of millstones described in nineteenth century census returns.

The steel gears in the gear pit include a large face or pit wheel that is directly connected to the waterwheel and transmits power to offset gears mounted on a stone base. These run a belt drive for turning large pulleys under the two runs of millstones, a large pulley that may have operated the elevators and machinery in the attic by way of long belts, and a smaller pulley that powered a belt drive for operating a grindstone on a wire-nailed stand situated next to the easternmost stair. The gears also operated a large pulley at the west end of the basement, seated on a concrete base and located outside the frame, that powered machinery in the addition by way of diagonal belts. The diagonal belt drive was cut through the stonework at the top of the basement wall, and the awkwardness of this arrangement, the fact that the cut is not whitewashed, and the presence of the aforementioned concrete base suggest this belt drive was installed in the twentieth century, possibly in 1925. Next to the frame stands a large wire-nailed board bin that received grain poured in from the room above. Mounted to its side at its base is the elevator boot that fed grain from the bin into the receiving elevator for transport to the attic. On the boot is a vial-like fixture of green glass that may have contained lubricant (similar fixtures are mounted over shaft joints on the first floor). There is evidence for former machinery near the long window on the north side of the basement in the form of peg holes in an overhead beam.

Mill Interior: Upper Floors

The first, second, and two attic stories are the frame levels of the mill. The mortise-and-tenoned and pegged timber framing is exposed on the first and second floors and is whitewashed, as are the insides of the vertical board siding and the ceiling joists, floor board undersides, and posts and bolsters. The two attic levels and the four levels of the addition are not whitewashed. Some knee braces in the original section appear to be pit-sawn. The addition has mortise-and-tenoned, pegged, vertical-sawn, timber framing that is less well constructed than that of the original section. (Because of the deteriorated condition of portions of the structure and floors of the addition not all areas of it were entered for close-up examination.) Some of the addition's ceiling joists retain strips of bark. The inside surfaces of the vertical board siding visible in the second floor of the addition have traces of whitewash and horizontal dark stains—perhaps marking the location of former purlins—that suggest the boards were reused (they may be from the partially disassembled formerly exterior west wall of the original section). Chamfered posts are positioned on the first, second, and third floors of the original section directly above the two basement posts (the addition has no posts). The well of the stair that rises near

National Register of Historic Places Continuation Sheet

Section number 7 Page 6

Tyro Mill Nelson County, Virginia

Description (continued)

the easternmost post is railed in with the same rounded newels and square balusters as the stair below. The stair to the second floor rises directly over the stair at the west end of the basement and it and the stairs to the two attic floors, which rise on the same wall (originally the exterior west wall of the mill) are all similar in character and similar to the two basement stairs. The stair between the first and second floors was modified with the construction of a bottom landing and lattice gate. The landing was constructed to accommodate a pulley that was installed to transmit power from the basement to the addition. Rising next to the west stairs from the first floor to the attic is a wooden chase similar to an elevator leg in form but wider. The chase is of wire-nailed circular-sawn construction and has hatches on the various floors. It may have served for cleaning: waste shoveled into it would have fallen to a container in the basement.

In the northeast corner of the original section first floor are two rooms defined by whitewashed vertical board partitions. Most architectural evidence suggests the rooms are original. For example, they have batten doors constructed with wrought nails and hung on wooden hinges. The easternmost room was remodeled for comfort and appearance, perhaps in the 1920s, for it has a lining of circular-sawn vertical boards under thick manila-colored wallpaper, a linoleum floor mat, a blue cloth roll-up blind on one of its two windows, and a stove thimble into the brick stove flue on the exterior. This room presumably served as the mill office during the twentieth century and it may have served the same purpose earlier. It is said to have been used as the Tyro Post Office from 1885 until the 1890s. The other room has exposed board walls that mix early planed boards and replacement circular-sawn boards. The single window in this room has a latch with a wrought hook. A major upright framing member on the exterior wall has notches that suggest some sort of machinery was attached to it. Some of the wall surfaces in this room are covered with stenciled and penciled graffiti including columns of figures, names such as "Joe Alln [sic]," "Massie," "R. L. Smith," and "Alex Mead," and a possible date (3.[19]03). Graffiti also appears on the outside of the wall partitions and on the door of the easternmost room. Also on the first floor is at least one window (on the south side) with iron staples and an extant cross beam for securing the batten shutter. The shutter is hung on wrought hinges with lancet ends attached with wrought nails. Between it and a door to the former forebay is a shuttered window that has been sided over on the exterior. Also at this location is a long metal crank with a turning wheel at its end that probably served for operating the sluice gate in the forebay. It is on this floor that structural damage becomes first apparent. A large section of structure and flooring on the south wall adjacent to the waterwheel has rotted. The problem extends into the second and third floors. Missing siding on the south end of the addition has caused similar damage and has contributed to the partial collapse of the addition's first-floor floor.

In the southeast corner of the first floor are located the two runs of millstones and associated features. Each run is relatively intact with two stones—the lower stationary bed millstone and the upper rotating runner millstone—the drum-like wooden vat that containins the stones, and the inverted pyramidal

National Register of Historic Places Continuation Sheet

Section number 7 Page 7

Tyro Mill Nelson County, Virginia

Description (continued)

form of the millstone hopper and its understructure, known as the horse. Whether the millstones are the original ones delivered to the mill site on Christmas Day 1845 is unknown. The horse above the easternmost millstones is constructed with pegs and cut nails and has beaded edges and the delicate wood, leather, and metal features under the hopper are well preserved. The horse on the other run has similar construction but is chamfered rather than beaded. Each run is provided with a crane for lifting off the runner millstone for maintenance. The westernmost crane has fallen but the easternmost crane remains upright. It is of whitewashed, pegged, heavy timber construction with a chamfered post and arm. A screw hoist with long turning handles at the top passes through the end of the arm to two iron grappling hooks. Between the two runs stands an elevator head powered by an overhead belt drive with a wooden pulley stenciled with the partially obliterated label "Limestone Pulley/Maysville Ky. USA." Other pulleys on the first floor were manufactured by Limestone Pulley and one also preserves a sticker that reads "Barker-Jennings Hardware Corp., 1000-1002 Commerce St., Lynchburg, Va." Also associated with the millstones are a whitewashed wooden bin with settee-like form and a piece of machinery that incorporates a sheet metal drum. The machinery is stenciled with the number 14862 and the inscription "No. 0/Capacity/10 to 15 bush. per hour." Near the stair and office, built into the floor, is a Fairbanks Standard scales with a 1955 inspection sticker. Towards the west end of the first floor are more overhead pulleys, elevators, and a floor grate for filling the bin in the basement. One of the elevator legs has an inspection hole covered by a swinging wood lid (the "wicket gate") and, hanging below, a stick used for getting the buckets inside the elevator unstuck and for tightening the tension on the bucket belt. Hanging under one of the pulley drive shafts is a metal bucket that may have held lubricant. Near the north entrance lies a large hopper which may have served for receiving grain and may originally have been positioned over the aforementioned floor grate.

The first floor of the addition has a Dutch door identical to those in the original section. Its hinge pintles are set into notches cut into a corner post that serves as the door jamb. The door retains its cross bar which rests on a carefully crafted wrought iron staple on the left side and slides into a mortise in the corner post/jamb on the right side. "Tyro" and other words are stenciled on the door. On the whitewashed vertical boards of the original section wall next to the door are hand-painted graffiti reading C. A. McNall, the stenciled word "wheat," and other words. The diagonal belt from the basement runs a pulley that powered a twentieth century machine with a metal hopper and stand. A chute from the ceiling fed grain into the hopper. Other machinery includes a machine with a red-stained cut-nailed wooden case, top hopper, and inner screen; a metal scales with ornate detail and the inscription A. Stimpson Co./Detroit Mich USA; and a thick wooden shaft (propped against a wall) that may have come from the wood gearing of the original section.

The second floor is similar in overall character to the floor below although it differs in other respects. The walls have horizontal board linings that rise to varying heights and are capped by cut-nailed canted

National Register of Historic Places Continuation Sheet

Section number 7 Page 8

Tyro Mill Nelson County, Virginia

Description (continued)

boards between the studs. The canted boards served to keep grain, stored on this level, from spilling behind the board linings. The adjacent major uprights of the original section and addition are bolted together. On one of the upright members of the formerly exterior west wall of the original section is carved a builder's mark (the numeral III). In the wide cut-nailed floor boards are numerous patched square openings through which elevators and chutes formerly passed. The wood patches are wirenailed suggesting the elevators and chutes (and associated machinery) were removed in the twentieth century. The chamfered posts on this level are more slender than the posts on the levels below (so too are the posts in the lower attic level). Most of the batten window shutters appear to be twentieth century in date.

The second floor, which probably contained between five and ten bolters used in sifting the flour, retains a wooden gear exchange with embellishments such as moldings at the joining of the gears and shafts. A screw conveyor on the Archimedean screw principle connects to a large wood gear in the addition. Stored on this level are other screw conveyors with hundreds of cut-nailed wooden pieces to form the spiraling screws. At the east end is a large wire-nailed millstone bin positioned directly above the easternmost millstones. Next to it is a smaller bin with a hopper bottom. Both bins adjoin what were formerly holding bins taking up the northeast corner. Adjoining the evidence for these large grain bins and flush with the north wall is a rocker beam with beaded edges and a decorative end. The beam pivots up and down on a wooden pin with a decorative end. In the southeast corner is a long iron rod with a threaded end that is mounted to the ceiling joists. Also on this floor is a Case Special Middlings Purifier enclosed in a casing with chamfering, beaded tongue-and-groove panels, and the stenciled number 2923.

The third floor appears to have served primarily for storing grain. Along its length run two long rectangular bins—one mostly dismantled—of wire-nailed construction. A chute from the ceiling has branching chutes that supplied grain to the bins (the main trunk of the chute continues at an angle to the east end of the space where it delivered grain to the millstone hopper on the floor below). Small square holes in the floor boards that form the bottoms of the chutes allowed grain to flow into chutes on the second floor. In the eaves on the south and north side are a series of stall-like bins of cut-nailed construction with numbers four through nine painted above the bins and on the posts between them (bins five through nine are on the north side and bins three and four are on the south side). An original wood shaft from the second floor powered ceiling-mounted wood gears (extant) and a shaft (gone) at the east end of this floor. The gears do not appear to relate to any extant features; they may have powered a now-missing hopper boy used for cooling and drying flour (hopper boys were typically located in mill attics). Other wood gears are stored on this level. In the third floor addition is a large machine, possibly used for making barrels, with a red painted or stained pegged and molded wood frame that supports two drum-like features. The two drums may correspond to two boards mounted on the gable wall (the boards may cover hatches). Metal fixtures on the edges of the frame may have

National Register of Historic Places Continuation Sheet

Section number 7 Page 9

Tyro Mill Nelson County, Virginia

Description (continued)

served for feeding twine to the machine.

The fourth floor, which has the smallest floor area because it is located in the apex of the gable, has a center bin with a screened top, stall-like side bins (probably for grain storage, one with the painted number 10), stored wooden gears, the top of the belt drive, and the receiving elevator head. The original roof structure has vertical-sawn common rafters joined at the ridge with pegged mortise-and-tenon joints. The rafter couples are carved with Roman numeral builder marks (III and VIII were observed) that are not in order. The common rafters in the addition, which are also vertical sawn, are butted and cut-nailed at the ridge.

Dwelling

The one-story-with-garret log dwelling faces the mill across a dirt lane. The logs are v-notched with stone and mortar chinking. Whitewash survives on the logs in protected areas. On the north gable end is a stone chimney with sloped shoulders and a detached replacement early or mid-twentieth century brick stack. To the left of the chimney, built into the log wall, is visible the jamb of the fireplace opening. The jamb board has a grooved outer edge reminiscent of the grooved uprights of stick chimneys (see architectural discussion below). In the gables are weatherboards, whitewashed and later painted white, attached with cut nails. The log ends of the garret floor joists project on the front and back. The front entry has been shifted slightly from its original location, as indicated by patched logs, and has a replacement twentieth century wood and glass panel door. The collapsing twentieth century front porch has square posts and balusters constructed from dimensional lumber. Lying on the rotted floor of the porch is a decorative wood-frame screen door. On the rear (south) elevation is a long horizontal window opening formerly fitted with a sliding multi-pane sash. A jamb remnant next to it probably indicates the location of an earlier window. At the bottom rear corner is a small square opening covered by a board (perhaps a former pet entrance).

A frame addition was made to the dwelling's east gable end in the early twentieth century and a slightly later frame ell was added to the rear of the first frame addition to give the house an overall L plan. The first addition has weatherboard siding attached with wire nails, a sliding six-pane window, a batten front door, large long stones forming front steps, and a foundation of stone corner piers with cinder block infill. The ell has brick-pattern asphalt siding, six-over-six windows, a rear panel door, and a foundation and interior stove flue of cinder block. Both additions have shed roofs with exposed rafter ends that slope away from the gable end of the log section.

The one-room interior of the log section was remodeled in the early twentieth century, probably at the same time the first addition was made, but it retains exposed ceiling joists and a corner ladder stair that may be original. The stair has what are probably replacement treads set into slots in the heavy string

National Register of Historic Places Continuation Sheet

Section number 7 Page 10

Tyro Mill Nelson County, Virginia

Description (continued)

boards. The outer string may have graining or decorative varnish under brown paint. The walls have modern wood paneling, the floor is covered with a paperboard-like material, and the ceiling has what may be early boards charred or painted black. The twentieth century mantel is simply constructed of boards and has metal mantel brackets. The fireplace opening is mostly bricked up and the fireplace itself is lined with fire bricks. The single room of the first addition was a kitchen with plywood wall cabinets and a crude counter with a double sink. There is evidence for a former rear sliding window that was removed when the ell was added. Both additions have sheetrock walls and ceilings.

The garret was probably used for sleeping. It has exposed common rafters, a floor sheathed with narrow tongue-and-groove boards, and board and sheetrock end walls. The multi-pane window in the east gable has a twentieth century frame. Lying on the floor is a broken stair railing of circular sawn dimensional lumber. The rafters are mortise-and-tenoned at the ridge and at least some appear to have been pit sawn. At least some rafter couples have matching Roman numeral builder marks (III and VII have been observed). The rafters appear to have been reused for they have cuts for former collar beams that are at irregular positions (also, with collar beams there would have been no headroom in the garrett). The collar beams were nailed to the rafters and builder marks appear on some rafters where the collar beams attached (I and II have been observed). There are modern painted graffiti in the north gable end ("Bobby & De.De./I love her").

Behind the dwelling is a collapsed one-story frame shed that formerly had a gable roof covered with asphalt roll roofing. The shed had white painted or whitewashed vertical board siding attached with wire nails and later brick-pattern asphalt siding. In front of the dwelling off the northeast corner are a metal pump and stones that may mark the location of a well. The yard in front of the house had many iris and daffodils coming up at the time of survey in late February.

National Register of Historic Places Continuation Sheet

Section number 8 Page 11

Tyro Mill Nelson County, Virginia

NARRATIVE STATEMENT OF SIGNIFICANCE

Summary

Tyro Mill, located at the foot of the Blue Ridge in Nelson County, Virginia, is a remarkably well preserved and complete burr-stone merchant mill built to Oliver Evans' principles of automated function. The large stone and frame mill was built for plantation owner William Massie in 1846-47 with wooden millworks installed by millwright Matthias Law. Tyro Mill produced flour and meal during the nineteenth century and powered an ice plant and sawmill in the twentieth century. Power was initially supplied by an overshot wooden wheel which was replaced in 1925 by the present Fitz steel wheel. William Massie was succeeded by his son Hope W. Massie, his grandson Madison E. Massie, and finally his great-grandson W. E. Massie who operated the mill until its closing in 1964. A timber frame addition was made in the late nineteenth century and belt drives, steel gears, and metal siding were added in the early twentieth century, but the mill preserves many early features including millstones, wooden gears and screw conveyors, a husk frame, and Dutch doors constructed with wrought nails. Near the mill stands a one-room log dwelling traditionally identified as the miller's house. Tyro Mill and its associated dwelling were recently acquired by the Association for the Preservation of Virginia Antiquities/Preservation Virginia and a sensitive rehabilitation is planned.

Applicable Criteria

Tyro Mill is eligible for the National Register under Criteria A and C in the industry and architecture areas of significance as a well preserved and relatively intact example of automated burr-stone milling technology built to the design principles of mill construction authority Oliver Evans and as one of the more prominent surviving historic mills in Nelson County. The property's significance is enhanced by the inclusion of the log dwelling traditionally identified as the miller's residence. The period of significance begins with the date the corn mill portion of the mill was placed in operation in 1846 and extends to 1956. Tyro Mill is eligible at the local level of significance.

Acknowledgments

A number of individuals and organizations provided assistance for the nomination. Foremost among these was Revolving Fund Director N. Gordon Lohr of the Association for the Preservation of Virginia Antiquities/Preservation Virginia. Assistance was also provided by Catherine Correll-Walls, Elizabeth Massie Goodwin, Bernard McGinnis, Ashley Neville, Margaret O'Bryant, and Ann Andrus, Quatro Hubbard, Jean McRae and Marc Wagner at the Virginia Department of Historic Resources.

National Register of Historic Places Continuation Sheet

Section number 8 Page 12

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

Historic Context

William Massie (1795-1862), the original owner of Tyro Mill, was the son of Major Thomas Massie (1747-1834), who himself established a mill after he settled in present-day Nelson County in 1803. Massie's Mill, as the father's mill was known, stood in the community of the same name until it burned and was rebuilt in 1866. In 1816 Thomas Massie sold William 1,400 acres "lying at the base of the great Depriest Mountain" for 6,000 Pounds. This core acreage, which Massie owned the majority of until the end of his life, embraced the last substantial tract of level ground on the Tye River below the river's headwaters in the Blue Ridge Mountains. By 1845 Massie had acquired over 7,300 acres in multiple parcels with a total value of buildings of \$12,500, according to county land tax records of that year. An inventory of his estate made in 1862 listed 170 slaves.

According to Massie family tradition, William Massie decided to build a mill after he had a falling out with a brother who had inherited control of Massie's Mill. Massie D. Thacker, who researched Tyro Mill for the Works Progress Administration in 1936, wrote, "It is said that Mr. Massie's reason for building the mill was, that he sent a wagon load of corn to another mill one day, and because there was so much corn ahead of his load, his driver had to wait all day for his meal, therefore he built a mill of his own." A version of the story told by a descendant in 1954 claims that the mill-owner brother slighted William Massie by not discussing a milling matter in person but referring Massie to his miller. Massie is said to have declared, "If I can't talk to my own brother, the owner, I'll build my own mill." In Massie's own words—preserved in his voluminous papers at the University of Texas and compiled by Oliver Morris Refsell—he had bad relations with his brother Dr. Thomas Massie for many years. In July 1845 William Massie considered building a small chopping mill (a mill for grinding wheat and other grains for animal feed) but after a slight to his wife by his brother Thomas he decided on a more ambitious project. "Nor could the writers [ie. William Massie's] spirit brook the thought," he wrote on September 9. 1845, "of depending on another for accommodation—(even though paying well for it) whose first pleasure it was to treat him with scorn & insult. He consequently determined forthwith (though vastly against both his interest & ease) to build not only a chopping mill but a mill for the manufacture of wheat on Tye River." Massie chose a site near "Owens's spring" and began planning the construction of the race. In June 1846 the county court heard a petition from Massie "who intends to build a water-Grist-Mill on his lands on Tye River" and appointed commissioners to determine what if any damages would result from the construction of head and tail races, a dam, and a mill pond. In July the commissioners reported the possibility of an effect on the Tye River and Blue Ridge Turnpike—which approximately followed the course of Highway 56 at Tyro—but no damages were awarded.2

On December 6, 1845, Massie noted in a memorandum book, "My teams start today at 4 Oclock P M to Montgomery for mill stones." Two days later an ice storm struck the region and Massie noted

National Register of Historic Places Continuation Sheet

Section number 8 Page 13

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

"My teams on the road to Montgomery have awful times." The bad weather and Massie's concern continued until Christmas Day when Massie reported, "This day the mill stones were unloaded at the Tyro Mill seat & the waggons brought home." The Tyro Mill millstones probably came from the Brush Mountain Millstone Quarry near Blacksburg, in operation as early as 1838 and an important regional source for high-quality millstones. On June 12, 1846, Massie referred to "my mill work with some thirty hands paralyzed," apparently a reference to his slaves being engaged in work on the mill and unable to do agricultural work. This lends credence to long standing family tradition that the mill was built by Massie's slaves. The work at this point probably involved completion of the stone foundation and preparation of the frame. On June 18 Massie noted "commencing the raising of the Tyro Mill house." His terminology suggests this was the raising of the frame for the upper stories.³

Massie's description of the equipping of the mill is more informative. For his millwright Massie hired Matthias Law of the Timber Ridge section of Rockbridge County. Law commenced work on the corn mill on May 1, 1846, and after a hiatus during the summer he completed the mill in November. He began work on the flour mill on the first of November 1846 and finished work on March 6, 1847. In addition to the corn mill and flour mill Massie refers to something called the "Country mill." One interpretation is that all three mills (ie. runs of millstones) were located in the Tyro Mill, as suggested by the 1880 federal census which described the mill as having three runs. Another possibility is that Massie had Law equip two separate mills under construction simultaneously (see discussion of Pharsalia Mill below).⁴

In the March 3, 1847, memorandum in which he summarized work on the mill, Massie complained about delays and cost overruns. He was most dissatisfied with Law whom he felt was unable to manage a workforce ("He works well himself, but don't seem to seem to understand how to push on work with many hands") and who was frequently incapacitated during the winter with "sick head ache" and problems with his hands. For his part Law must have complained about Massie's promptness in supplying materials and mill components. "Mr Law should recollect," Massie defended himself, "that every shaft above the hush [husk frame] was delivered to him hewed—all the heads except one pinnioned & one spur head finished. The screw & screw band wheel were furnished, the country bolt was furnished, & with all he has been furnished with nice soft white pine which has speeded up his work immensely." The same memo lists others who assisted Law with the work. There was a Mr. Southerd who spent three months at Tyro helping Law "to fix the bolt," that is, set up the bolters on the second floor of the mill. Massie obtained the services of Tom Harvie and John Essix, presumably wood- or ironworkers, and he loaned Law the services of his slaves Bill and Tandy, who were presumably skilled workers as well. Of his other slaves Massie claimed that Law "knows I have induced hands to work for him as low as I could."

Slavery became a subject of contention between the millwright and the mill owner. A letter from Law

National Register of Historic Places Continuation Sheet

Section number 8 Page 14

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

to Massie dated May 15, 1847, referred to comments Law had made to another slave owner that Massie apparently took issue with. Law said of slaves and their treatment, "you ought to treat them well for it is all they git and they have a fealing as well as we have." At the end of the letter Law apologized to Massie. "If I should have said enything that was rong I am sorry for it or should have bin so." The disagreement occurred about the same time that Law and Massie were discussing the possibility of Law erecting a sawmill on Massie's land. In April 1847 Massie concluded "I have more mill property already on my land than I desire" and so despite the "considerable convenience" decided against having a sawmill. Massie's other experiences with Law undoubtedly played into his decision. A month earlier, on March 6, 1847, Massie wrote in his memorandum book: "This day Law finishes the Tyro Mill. God damn him."

Massie's disbursements on the mill gauged the progress of its construction. In 1845 he spent just under \$400 on the project, in 1846 he spent \$2,580, and in 1847 he spent \$1,111. On November 5, 1846, a correspondent in New York wrote that he was shipping Massie millstones by way of Richmond. Perhaps these were additional millstones or they may have been replacements for Montgomery County stones that were damaged or unsuitable. The first Tyro miller appears to have been a Mr. Newham who did not last long. Newham forgot to shut the head gates on the river one November night in 1847 causing damage to the mill race. Cyrus White was hired as miller in May or June of 1849 but halfway through his one-year contract John Russel Robertson was hired. White was told that Robertson was preferred because he was a "family man." The hiring of Robertson coincides with the traditional ca. 1850 date for the log dwelling identified as the miller's cabin. Robertson and his family may have been the dwelling's first occupants.

The 1850 federal census was the first to record information on Tyro Mill. The census enumerates two mills belonging to William Massie. Massie's "M. [Merchant] Mill," capitalized at \$4,000, employed two hands in the production of \$6,000 worth of flour. The term "merchant milling" implies the production of large amounts of flour for sale on the market, as opposed to the small batches milled for farmers known as "custom milling." (Presumably custom milling was carried out at the mill as a sideline; from 1938 to 1964 it was the only service provided.) William Massie's "corn mills" (plural), capitalized at \$1,000, employed three hands in the production of \$9,000 worth of meal. The merchant mill would have been Tyro Mill but identification of the separately enumerated corn mill is problematic. One possibility is that the corn mill was Massie's nearby Pharsalia Mill. In 1936 Massie Thacker wrote that the three-story Pharsalia Mill, which was by then a ruin, was used only for corn milling. "It is not known why Mr. Massie built this mill so large for so small a business," Thacker commented. William Massie also owned a mill on his Montebello plantation up on the Blue Ridge. Despite these uncertainties it appears that by 1860 all major mill operations were consolidated at Tyro. The 1860 census enumerated one "mill" where \$7,855 worth of flour, \$6,750 worth of corn meal, and \$845 worth of rye meal were produced. The 1860 census also noted that the mill was water powered,

National Register of Historic Places Continuation Sheet

Section number 8 Page 15

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

contained "3 stones" (presumably three runs or pairs of millstones), and employed one or two hands (the number of hands is unclear in the schedule although the \$30 annual wages suggest two hands were paid).⁸

Tyro Mill may have stood at the center of a small industrial complex, as was the case with other Nelson County mill complexes of the era such as Variety Mills. The 1850 census recorded Massie as the owner of carpentry and blacksmithing operations in addition to his mills. The carpenter shop appears to have been manned by one hand and generated \$800 worth of product. The blacksmith shop employed four hands and generated \$700 worth of product. The motive power provided by a mill would have been useful in blacksmith and carpentry work and there is evidence that power was transmitted through the basement window opening on the east end of the mill at an early date. That Massie was involved in the blacksmith and carpentry businesses as early as 1850 adds further credence to the tradition that his slaves were involved in the construction of the mill. One structure that was essential to the mill's operation was the mill dam which was located about three-quarters of a mile upstream on the Tye River. In 1936 the dam was described as "a low structure of logs, stone, brush and mud"—essentially what is known as a crib dam. The dam that existed in 1936 was probably not the original dam. In writing about the Massie's Mill dam downstream from Tyro Mill, Massie Thacker noted that that dam was "a very low structure of logs and rocks which can be very easily replaced in case of a washout." In later years W. E. Massie encased the dam in concrete. The dam no longer stands.9

After William Massie died in June 1862 his son Hope W. Massie (1843-92) returned from the Confederate army to take over operation of the mill. In 1863 Hope married a cousin, Laura Effinger, and the couple set up housekeeping in what is described as a "tenant house" at the mill. According to Massie descendant Elizabeth Goodwin, this house stood on the site of the present 1900 Massie House located a short distance to the north. A Civil War-era map of Nelson County shows a Massie living across what was then the Tye River and Blue Ridge Turnpike from the mill. (The turnpike passed much closer to the mill than the present Highway 56.) In 1885 Hope Massie was named postmaster of the newly established Tyro Post Office. The post office is said to have been housed in the mill at first and then to have moved to the adjacent frame store built in 1893. The 1870 federal census, the first that would have enumerated the mill during Hope's ownership, did not list a mill under his name. (The 1870 census listed the corn mill of Thomas Massie, the grist mill of P. C. Massie, and the sawmill of M. C. Massie.) The 1880 census does record Tyro Mill. The mill was described as employing a maximum of two hands year round and was powered by a twelve-horsepower overshot waterwheel. Three runs of millstones produced 160 barrels of flour, 30,000 pounds of corn meal, and 2,000 pounds of buckwheat flour for a total value of product of \$4,500."

Hope Massie presumably built the addition to the mill. The addition's architectural characteristics

National Register of Historic Places Continuation Sheet

Section number 8 Page 16

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

suggest a date of construction after the Civil War but before the end of the nineteenth century. Hope Massie's grandson W. E. Massie, interviewed in the early 1970s, recalled, "At first the mill was limited to grinding corn meal and rye for feed. Then they decided to enlarge it to make flour. That accounts for the addition put on at the back. This was evidently added before the building was completed because there's no record of any addition after the mill was in operation." W. E. Massie's theory does not appear to be supported by architectural and historical evidence, although the fact that he did not have knowledge of the addition's construction suggests it occurred well before his birth. Perhaps the addition was made in the decade or two following the Civil War as the region recovered from the war's effects. By the 1940s the addition served largely for storage."

Soon after Hope Massie's death in 1892 his son Madison Effinger Massie (1866-1933) returned home to operate the family mill and farm. Prior to returning to Tyro, M. E. Massie worked as a bookkeeper for a coal company in Southwest Virginia. A store was established at Tyro in 1890 and the business was moved to the present frame store building by M. E. Massie in 1893. M. E. Massie was succeeded by his son Williams Effinger Massie (1903-87), known to his family since childhood as "Captain Billy." W. E. Massie came back to Tyro after attending Virginia Episcopal School in Lynchburg and, as he put it, "talked my father into letting me operate the mill." In 1925 W. E. Massie installed a steel waterwheel manufactured by the Fitz Water Wheel Company of Hanover, Pennsylvania, and he switched the millworks to a belt drive system although he carefully preserved most of the wooden gearing. (Nelson County's Woodson's Mill also has a Fitz waterwheel and Massie's Mill formerly had one.) "Pretty soon after that," W. E. Massie recalled in 1973, "we put in an ice plant and operated that with water power and sold ice all over the county. Then we installed a dynamo (generator) and generated electricity for all the neighborhood around here. Next we installed a sawmill (and sawed lumber for market), a planing machine (that finished the lumber), and a cutoff saw (that was used to saw off slabs). Slabs were sold as a byproduct. We had old grindstones on shafts, driven by belts." The corrugated metal siding probably dates to the 1920s as well.¹²

The sawmill and planer were added in 1927. W. E. Massie's daughter Elizabeth Massie Goodwin recalls that the sawmill was located in a frame shed addition that extended from the east end of the foundation level with power from a belt drive extended through the window on that elevation. The ice plant stood on the hillside beyond the log dwelling and was run at night so that the water power could be used for the mill during the day. Massie made corn meal and cracked corn for chicken feed but not flour. His duties at his store—the frame store and then the 1940 cinder block store and post office that superceded it—prevented him from operating the mill except on Sunday afternoons when the store was closed. Massie was able to judge the consistency of the meal with his left hand, which was less calloused than his right hand and therefore more sensitive, and he would adjust the level of the sluice gate on the forebay to control the volume of water and hence the speed of the machinery and consistency of the meal. By Goodwin's day the corn was delivered by truck but she recalls one old

National Register of Historic Places Continuation Sheet

Section number 8 Page 17

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

bearded mountaineer named Zack Lawhorne who used a "slide" (a sled-like conveyance used by lumbermen) pulled by an ox and who always offered Massie a swig from the jug he kept with him. Massie's millstone picker, the craftsman who sharpened the stones, was Gates Hatter who lived in one of the side sheds of the frame store at Tyro. Goodwin occasionally helped her father by standing in the millstone bin to push grain towards its center hole. For the last twenty years or so of the mill's operation it failed to turn a profit. The mill closed in 1964 after the death of Massie's mother Mary Cambell "Cammie" Ford Massie, who had retained ownership. Another of the county's venerable merchant mills closed about the same time: Woodson's Mill, in 1963.¹³

Several factors contributed to the unprofitability of Tyro Mill and its associated enterprises in later years. W. E. Massie noted that in the 1930s he employed three men—one of whom was partially paralyzed and the other two elderly—to operate the sawmill, but with the introduction of the minimum wage he could no longer afford to employ his workers with the profits from the operation. "The next thing that happened," Massie recalled, "was the REA (Rural Electrification Act). It came along in 1938. Then everybody immediately bought electric refrigerators. That knocked my ice business out overnight." Finally Massie was required to mouse-proof the mill if he wanted to continue marketing commeal. "At that time I was supplying Lynchburg with all the meal it could use." Instead of complying Massie scaled back to custom grinding. "From then on, 1938 to 1965 [sic], the mill was run as a hobby."

W. E. Massie's career encompassed more than milling and storekeeping. When his mother retired as Tyro postmaster in 1949, Massie took over. He became active in the National League of Postmasters and served as the organization's national president in 1955-56. As a board member of the First National Bank of Nelson County and through his work in civic organizations Massie promoted local tourism. He served as a liaison between local citizens, property owners, and the federal government to facilitate the acquisition of Crabtree Falls by the forest service in the late 1960s. He rendered a similar service after the devastating flooding from Hurricane Camille in 1969, helping to coordinate assistance provided by Mennonites to local families. Five years after Massie's death in 1987 the mill was purchased by a Lovingston businessman who planned to dismantle it and move it to Lynchburg. When the owner's plans changed and the mill was put up for sale, local historians Bill Whitehead and Doug Coleman interested Judge Oliver Pollard of Wintergreen in purchasing the mill with the intention of restoring it. At this time Whitehead, Coleman and others removed trees that had fallen on the mill and made basic repairs to slow the building's deterioration. Pollard was unable to purchase adjacent property and decided to sell the mill. By the winter of 2004 the Association for the Preservation of Virginia Antiquities had become involved. The mill was purchased by the APVA's Revolving Fund "to save it from being relocated unnecessarily." This concern was motivated by the fate of two other important Nelson County mills. Nearby Massie's Mill was dismantled and moved to Richmond in 1993 for reconstruction by the Valentine Museum. (In recent years the county Board of

National Register of Historic Places Continuation Sheet

Section number 8 Page 18

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

Supervisors considered investigating how Massie's Mill could be returned to the county and reconstructed.) Midway Mill, a stone and timber merchant mill, was demolished for materials in 1998. The county's roster of mills has been further reduced by flood damage, especially during Hurricane Camille in 1969. In a 1971 article on W. E. Massie and Tyro Mill a reporter noted, "One of Massie's fondest hopes is that someday the mill might be restored." Tyro Mill's acquisition by APVA and its transfer to present owners Catherine Correll-Walls and Mack L. Walls will help ensure that outcome.¹⁵

Architectural Discussion

Tyro Mill is a product of the revolution in mill design begun by inventor Oliver Evans (1755-1819) in the late eighteenth century. Evans developed automated machinery that reduced the labor requirements of mills and made them more efficient. Among his innovations were the hopper boy, which dried and cooled freshly milled flour, and elevators and screw conveyors for transporting raw material and products. Evans popularized his innovations in *The Young Mill-wright and Miller's Guide*, which went through fifteen editions between 1795 and 1850. George Washington and Thomas Jefferson asked Evans to design gristmills for them.¹⁶

Oliver Evans' automated system worked best in multi-level mills that relied on gravity in addition to waterpower for their operation. Consequently, most merchant mills constructed on the Evans principle in Virginia and elsewhere were two or more stories in height. Tyro Mill is typical of the form: a large building of five levels with a gable roof and simple form and detail. It is also typical in layout, with the primary motive gears located in the basement, the millstones on the first floor, and bolters and grain bins on upper floors. Tyro Mill's overshot wheel was the most efficient type of waterwheel and was made possible by the long head race leading from the Tye River. The mill's beautifully crafted husk frame served the functions of damping vibrations from the gears and millstones and of supporting the weight of the millstones. Originally there were apparently three runs of millstones; the third run, which may have been located above the west end of the husk frame, was probably removed when the gearing in that area was reconfigured to provide power for machinery in the addition. Unlike many large mills of its era, Tyro Mill appears never to have been fitted for roller milling, the principal milling innovation of the late nineteenth century.

Tyro Mill's doors have features related to the building's function. The wooden hinges of the doors to the office and adjacent room on the first floor may have been intended as fire-prevention features. Millers strove to reduce sparks that might ignite the dust produced in milling. Some, for example, used wooden shovels to scoop grain rather than iron ones. The rooms' two doors are close to the millstones where much of the dust would have been generated. That the exterior doors on the first floor have iron hinges may reflect the fact that they are not located as near to the millstones. The Dutch door form of the ground level exterior doors kept out the hogs that congregated at mills in search of edible

National Register of Historic Places Continuation Sheet

Section number 8 Page 19

Tyro Mill Nelson County, Virginia

OMB Approval No. 1024-0018

Statement of Significance (continued)

waste products. The use of wrought nails in the construction of the Dutch doors deserves mention. Wrought nails were used infrequently after machine cut nails became popular in the early decades of the nineteenth century. One residual application, however, was in the construction of doors where wrought nails were considered to have superior clinching properties. The wrought nails in the Dutch doors (and some batten window shutters) of Tyro Mill were probably used for this purpose, rather than being evidence of pre-1820 construction.¹⁷

The log dwelling is relatively simple in form and appointments. It appears to have originally lacked any wings or additional rooms. The logs visible above the ceiling of the first addition are weathered, which suggests that no room attached to the east gable end in the nineteenth century, and there is no evidence for attached rooms on the other elevations. The grooved fireplace jamb visible on the west gable end is intriguing because it may constitute evidence for an original wood chimney. Wood chimneys are vanishingly rare in Virginia as is architectural evidence for their former existence. That the stone chimney does not overlap and conceal the jamb suggests it was built some time after the fireplace opening was cut, which could be evidence the present chimney is a replacement, or the mismatch could simply be from careless construction. The log section was remodeled and added to in the early twentieth century, perhaps the 1920s or 1930s. The dwelling was last occupied in the 1970s.

Endnotes

- 1. Nelson County Deed Book 2, p. 360; Will Book L, p. 411; 1840-1850 Land Tax Book; "Mill at Tyro," 2; "Notes on Massie's Mill."
- 2. Refsell, "Massies of Virginia," vol. 1 p. 507; Nelson County Deed Book 11, p. 380; Sellers, "'Captain Billy;" Crockford, "Storekeeper in Tyro;" Bill Whitehead, quoted in Morell, "Restoration money approved for Tyro Mill;" Jeffers, *Windows to the Blue Ridge*, 10, 12. Antebellum Nelson County land tax records do not identify the reasons for increases and decreases in the value of buildings on parcels. The value of buildings on Massie's parcels remained virtually unchanged from 1840 through 1848. A notation that \$2,500 in building improvements were made to a previously vacant 267-acre parcel might be taken as indication for the construction of Tyro Mill if a detailed study of Massie's land acquisitions and their whereabouts proves that the parcel was located at Tyro. The amount is less than the \$4,000-\$5,000 mill capitalization recorded in the 1850 federal census.
- 3. Refsell, "Massies of Virginia," vol. 1 pp. 533-534; Worsham, Rotenizer and Pezzoni, "Montgomery County Historic Sites Survey," 157.
- 4. Refsell, "Massies of Virginia," vol. 1 p. 513;

National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 20

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

- 5. Ibid., 513-514.
- 6. Ibid., 515, 517, 535.
- 7. Ibid., 537, 547, 552, 556, 559, 584, 589, 590.
- 8. Thacker, "'Pharsalia' mill site;" Wimer, "128-year-old water powered mill at Tyro;" Nelson County Will Book L, p. 411.
- 9. Elizabeth Massie Goodwin personal communication; Thacker, "Massie's Mill;" Nelson County Will Book L, p. 384; Thomas Jefferson Planning District, "Historic Resources Identification and Assessment of Nelson County," 48.
- 10. Elizabeth Massie Goodwin personal communication; "Mill at Tyro;" "Map of Nelson and Amherst counties;" Nelson County Deed Book 28, p. 310; Boyd, *Virginia state business directory;* 1870 and 1880 federal censuses.
- 11. Elizabeth Massie Goodwin personal communication; Jeffers, Windows to the Blue Ridge, 12.
- 12. Jeffers, *Windows to the Blue Ridge*, 14; Sellers, "`Captain Billy;" Goodwin, "William Effinger Massie," 162; Kurek, "Madison Effinger Massie," 160-161; Wagner and Smead, "Woodson's Mill," 7.8, 8.15.
- 13. Elizabeth Massie Goodwin personal communication; Goodwin, "William Effinger Massie," 162; Wagner and Smead, "Woodson's Mill," 7.1.
- 14. Elizabeth Massie Goodwin personal communication; Jeffers, *Windows to the Blue Ridge*, 14-16. According to Elizabeth Massie Goodwin, her father's method of mouse control was to catch a black snake, carry it to the mill in a gunny sack, and let it go.
- 15. Elizabeth Massie Goodwin and N. Gordon Lohr personal communication; Goodwin, "William Effinger Massie," 162; Sellers, "`Captain Billy;" Morell, "Restoration money approved for Tyro Mill;" Historic Ventures 3:1 (February 2004): 2; *Lynchburg News and Advance*, November 28, 1993; *Lynchburg News*, December 30, 1998; Nelson County Board of Supervisors Minutes for January 8, 2002 at Rural Nelson website; Wagner and Smead, "Woodson's Mill," 7.11.
- 16. Zimiles and Zimiles, Early American Mills, 36; Gilbert, Where Industry Failed, 13.

National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 21

Tyro Mill Nelson County, Virginia

Statement of Significance (continued)

17. Zimiles and Zimiles, *Early American Mills*, 32, 36; Comments by Orlando Ridout V and Willie Graham, "Investigation of Historic Buildings."

National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 22

Tyro Mill Nelson County, Virginia

Bibliography
Boyd, Andrew. Virginia state business directory. Richmond, Va.: B. Bates, 1871.
Briggs, Ferrol. Nelson County Scrapbooks. Virginia Department of Historic Resources, Richmond, Va.
Chataigne, J. H., comp. <i>Chataigne's Virginia Business Directory and Gazetteer, 1880-81.</i> Richmond, Va.: Baughman Brothers, 1880.
Chataigne's Virginia Gazetteer and Classified Business Directory, 1893-94. Richmond, Va.: J. H. Chataigne, 1893.
Claiborne, J. G., ed. <i>Nelson County Virginia, Historical and Industrial.</i> Lynchburg, Va.: Brown-Morrison Company, 1925.
Crockford, Hamilton. "Storekeeper in Tyro has history for hobby." <i>Richmond Times-Dispatch</i> , April 4, 1954.
Edwards, Richard, ed. Statistical Gazetteer of the State of Virginia. Richmond, Va.: 1855.
Gilbert, Dave. Where Industry Failed: Water-Powered Mills at Harpers Ferry, West Virginia. Charleston, W.V.: Pictorial Histories Publishing Company, 1984.
Goodwin, Elizabeth Massie. Personal communication with author, 2006.
"Major Thomas Massie." In Nelson County Book Committee. <i>Nelson County, Virginia, heritage, 1807-2000.</i>
"William Effinger Massie." In Nelson County Book Committee. <i>Nelson County, Virginia, heritage, 1807-2000.</i>
Hazen, Theodore R. "A Cross Section of a Typical Oliver Evans Mill." Report on line at angelfire.com.
"The Same Typical Oliver Evans Mill Shown in Side Cross Section." Report on line at angelfire.com.

__. "Schematic Layout of a Typical Oliver Evans Mill." Report on line at angelfire.com.

National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 23

Tyro Mill Nelson County, Virginia

Bibliography (continued)

Historic Ventures. Newsletter of the Association for the Preservation of Virginia Antiquities.

"The Investigation of Historic Buildings." Seminar held at the 1994 Vernacular Architecture Forum Annual Conference, Charleston, S.C.

Jeffers, Jack. Windows to the Blue Ridge. Lyndhurst, Va.: Jeffers Outdoor Art, 1973.

Kurek, Barbara Massie. Index to "The Massies of Virginia." n. d.

_____. "Madison Effinger Massie and Mary Cambell Ford Massie." In Nelson County Book Committee. *Nelson County, Virginia, heritage, 1807-2000.*

Lohr, N. Gordon, personal communication.

Loth, Calder. *The Virginia Landmarks Register*. Fourth Edition. Charlottesville, Va.: University Press of Virginia, 1999.

Lynchburg News. Lynchburg, Va.

Lynchburg News and Advance. Lynchburg, Va.

"Map of Nelson and Amherst counties, Va." 1860s.

"The Mill at Tyro." Backroads 21:243 (May 2002): cover, 2.

Morell, Mike. "Restoration money approved for Tyro Mill." *Nelson County Times*, January 24, 2002.

Nelson, Lee H. "Nail Chronology as an aid to dating old buildings." American Association for State And Local History Technical Leaflet, November 1968.

Nelson County deed, tax and will records. Nelson County Courthouse, Lovingston, Va., and Library of Virginia, Richmond, Va.

Nelson County Book Committee. *Nelson County, Virginia, heritage, 1807-2000.* Summersville, W.V.: S. E. Grose, 2001.

Nelson County Historical Society Reference Files. Nelson County Public Library, Lovingston, Va.

National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 24

Tyro Mill Nelson County, Virginia

Bibliography (continued)

- Neville, Ashley. "Tyro Mill." Virginia Department of Historic Resources Reconnaissance Level Survey Form, 1992.
- "Notes on Massie's Mill." Manuscript, n.d. Nelson County Historical Society Reference Files.
- Refsell, Oliver Morris. "The Massies of Virginia: Documentary History of a Planter Family." Diss. (two volumes), University of Texas, 1959.
- Rural Nelson website (www.ruralnelson.org).
- Sellers, Rebecca M. "'Captain Billy' Massie Retiring—Selling Out." *Nelson County Times* (1971 article in the Ferrol Briggs Nelson County Scrapbooks).
- Thacker, Massie D. "Massie's Mill." Works Progress Administration of Virginia Historical Inventory Report, 1936.
- _____. "'Pharsalia' mill site." Works Progress Administration of Virginia Historical Inventory Report, 1936.
- _____. Tyro Mill." Works Progress Administration of Va. Historical Inventory Report, 1936.
- The Thomas Jefferson Planning District. "Historic Resources Identification and Assessment of Nelson County, Virginia." Report, 1993.
- U.S. Census, Nelson County free population and industrial schedules.
- Wagner, Marc C., and Susan E. Smead. "Woodson's Mill." National Register of Historic Places Registration Form, 1992.
- "White's Mill." National Register of Historic Places Inventory-Nomination Form, 1974.
- Wimer, Elizabeth. "128-year-old water powered mill at Tyro one of few still in operation in this area; Massie is owner." April 20, 1950 newspaper clipping in the possession of Elizabeth Massie Goodwin, Tyro, Va.
- Worsham, Gibson, David Rotenizer, and J. Daniel Pezzoni. "Montgomery County Historic Sites Survey." Vol. 1. Christiansburg, Va.: 1986.

National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 25

Tyro Mill Nelson County, Virginia

Bibliography (continued)

Zimiles, Martha, and Murray Zimiles. Early American Mills. New York: Bramhall House, 1973.

National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 26

Tyro Mill Nelson County, Virginia

Verbal Boundary Description

The nomination boundaries correspond to the boundaries of the modern parcel on which Tyro Mill and the log dwelling stand. The parcel designation is Nelson County Tax Map Section 41 Parcel ((1)) 8A.

Boundary Justification

The nominated area includes the mill and associated log dwelling, resources owned by the sponsor of the nomination. Other adjacent associated historic resources such as the 1893 and 1940 stores are not owned by the sponsor and are therefore excluded from the nomination.

National Park Service

National Register of Historic Places Continuation Sheet

Section number Photos Page 27

Tyro Mill Nelson County, Virginia

PHOTOGRAPHS

All photographs are of:

TYRO MILL Nelson County, Virginia DHR file no. 062-0028 J. Daniel Pezzoni, Photographer

DATE: February 2006

VIEW OF: South and east sides of mill.

NEG. NO.: 22787 PHOTO 1 OF 5

DATE: February 2006

VIEW OF: Basement of mill.

NEG. NO.: 22787 PHOTO 2 OF 5

DATE: February 2006

VIEW OF: Easternmost millstones on first floor of mill.

NEG. NO.: 22787 PHOTO 3 OF 5

DATE: February 2006

VIEW OF: Wooden gearing on second floor of mill.

NEG. NO.: 22787 PHOTO 4 OF 5

DATE: February 2006

VIEW OF: North (front) and west sides of log dwelling with outbuilding ruin behind.

NEG. NO.: 22787 PHOTO 5 OF 5